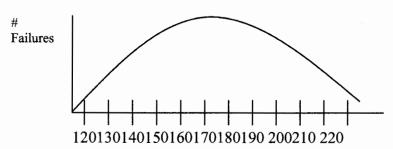
## Practice Test Statistics

1. While reviewing tank rollovers across the Marine Corps and Army services, you determined a death rate of 2.5 per 100,000. On your Marine Corps Base where you have a total of 850 tank crewmembers, one is the probability that you have exactly 1 active duty death due to tank rollovers this year?  a.1%  b.2%  c.3%  d.4%
2. During a sound level survey, you measured the following readings in the exact spot inside a industrial facility: 77 dB, 83 dB, 85 dB, 79 dB, 82 dB. What is the average of these measurements? a.80.2 b.81.2 c.82.2 d.83.2
3. For Problem#2 above, what is the standard deviation? a.3.0 b.3.2 c.4.0 d.5.0
4. Your office recently bought a new noise meter, but you are not sure if it is more precise than your previous older model. The new noise meter, designated Noise Meter A, is taken to the field and used in 10 different locations to measure sound in the dBA scale. Here, the mean was 85 dB with a standard deviation of 3.0. The older noise meter, designated Noise Meter B, was taken to the same sites and the same time as Noise Meter A. Here, the readings from Noise Meter B had a mean of 87 dB with a standard deviation of 3.5. Which noise meter had better precision?  a. Noise Meter B  b. Noise Meter A  c. Both have same level of precision

5. As a safety officer for Security Cameras, Inc, you have been tracking the failure rates of Security Model A Camera units. Based upon the graph below, a mean failure rate at 170 Days of constant use, and a Standard Deviation of 100, what is the probability that the back-up unit will fail at 210 hours of service?



a.20%

b.30%

c.50%

d.65%